STIC Search Report
Biotech-Chem Library

STIC Database Tracking Number: 184131

TO: Shailendra Kumar Location: 5c03 / 5c18 Wednesday, May 10, 2006 Art Unit: 1621 Phone: 571-272-0640 Serial Number: 10 / 510409	From: Jan Delaval Location: Biotech-Chem Library Remsen 1a51 Phone: 571-272-2504 jan.delaval@uspto.gov

Search Notes

ACCESS DB # 104151

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Scientific and Technical Information Center

SEARCH REQUEST FORM

Requester's Full Name: S. Kumar Examiner #: 69594 Date: 4/4/06
Art Unit: 1621 Phone Number: 2-0640 Serial Number: 10/510 409
Location (Bldg/Room#): REM (Mailbox #): 5C18 Results Format Preferred (circle): PAPER DISK
5C03

To ensure an efficient and quality search, please attach a copy of the cover sheet, claims, and abstract or fill out the following:

Title of Invention: Aromatic glycols and polyols, preparation process ...

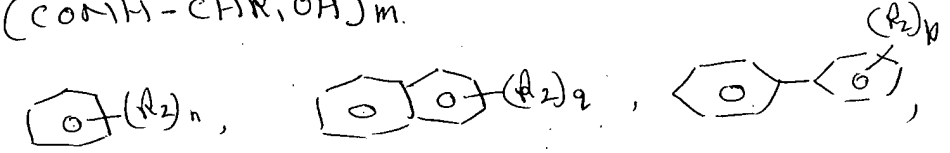
Inventors (please provide full names): Franco Codignola

Earliest Priority Date: 4/8/02

Search Topic:
Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known.

For Sequence Searches Only *Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

$R(CONH-CHR_1OH)_m$

R 

aliphatic chain, linear or branched

n is 0-4
p is 0 to 6
q is 0 to 8

R_1 same or different, H, alkyl

m = 2-4

Also see claim 16 process

STAFF USE ONLY

Searcher: Jan
Searcher Phone #: 22504
Searcher Location:
Date Searcher Picked Up: 5/10/06
Date Completed: 5/10/06
Searcher Prep & Review Time: 1
Online Time: 18

Type of Search

NA Sequence (#)
AA Sequence (#)
✓ Structure (#)
Bibliographic
Litigation
Fulltext
Other

Vendors and cost where applicable

✓ STN Dialog
Questel/Orbit Lexis/Nexis
Westlaw WWW/Internet
In-house sequence systems
Commercial Oligomer Score/Length
Interference SPDI Encode/Transl
Other (specify)

APR - 7 2006

STIC SEARCH RESULTS FEEDBACK FORM

Biotech-Chem Library

Questions about the scope or the results of the search? Contact ***the searcher or contact:***

Mary Hale, Information Branch Supervisor
22507, Remsen 1d86

Voluntary Results Feedback Form

- *I am an examiner in Workgroup:* ☐ *Example: 1610*
- *Relevant prior art **found**, search results used as follows:*
  - ☐ 102 rejection
  - ☐ 103 rejection
  - ☐ Cited as being of interest.
  - ☐ Helped examiner better understand the invention.
  - ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature
  (journal articles, conference proceedings, new product announcements etc.)

- *Relevant prior art **not found:***
  - ☐ Results verified the lack of relevant prior art (helped determine patentability).
  - ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to STIC/Biotech-Chem Library CM1 – Circ. Desk

```
=> fil casreact
FILE 'CASREACT' ENTERED AT 09:24:51 ON 10 MAY 2006
USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT
COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)
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FILE CONTENT:1840 - 7 May 2006 VOL 144 ISS 19

New CAS Information Use Policies, enter HELP USAGETERMS for details.

**************************************************************
*                                                            *
*     CASREACT now has more than 10 million reactions        *
*                                                            *
**************************************************************
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Some CASREACT records are derived from the ZIC/VINITI database (1974-1991) provided by InfoChem, INPI data prior to 1986, and Biotransformations database compiled under the direction of Professor Dr. Klaus Kieslich.

This file contains CAS Registry Numbers for easy and accurate substance identification.

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=> d sta que
L1              STR

RRT   7       4              PRO          18      19                  Cb—Cb
      O       O                           O       O                   @8  @9
      ‖       ‖                           ‖       ‖
H2N···C—G1—C···NH2          O—CH—N···C—G2—C···N—CH—O
  6   5   1   2   3        10  11  12  13  14  15  16  17  20


VAR G1=CB/8-5 9-2
VAR G2=CB/8-13 9-15
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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  20

STEREO ATTRIBUTES: NONE
L5              STR

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H2N···C—G1—C···NH2          O—Ak—N···C—G2—C···N—Ak—O
  6   5   1   2   3        10  11  12  13  14  15  16  17  20


VAR G1=CB/8-5 9-2
VAR G2=CB/8-13 9-15
NODE ATTRIBUTES:
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DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

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RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 20

STEREO ATTRIBUTES: NONE
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L8 0 SEA FILE=CASREACT SUB=L7 SSS FUL L1 (0 REACTIONS)

100.0% DONE 0 VERIFIED 0 HIT RXNS 0 DOCS
SEARCH TIME: 00.00.01

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USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 10 May 2006 VOL 144 ISS 20
FILE LAST UPDATED: 9 May 2006 (20060509/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate
substance identification.

=> d l28 all hitstr tot

L28 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2003:818482 HCAPLUS
DN 139:308104
ED Entered STN: 17 Oct 2003
TI Aromatic glycols and polyols, preparation process and their use as monomers
IN Codignola, Franco
PA Eurotecnica Development & Licensing S.p.A, Italy
SO PCT Int. Appl., 21 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C08G0063-685
ICS C07C0235-74; C07C0235-76; C07C0235-84
CC 35-2 (Chemistry of Synthetic High Polymers)
FAN.CNT 1
PATENT NO. KIND DATE APPLICATION NO. DATE

PI	WO 2003085026	A1	20031016	WO 2003-EP3665	20030408
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	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2003229628	A1	20031020	AU 2003-229628	20030408
	EP 1492835	A1	20050105	EP 2003-722425	20030408
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	US 2005215761	A1	20050929	US 2004-510409	20041005
PRAI	IT 2002-MI734	A	20020408		
	WO 2003-EP3665	W	20030408		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2003085026	ICM	C08G0063-685
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	IPCR	C07C0235-00 [I,C]; C07C0235-74 [I,A]; C07C0235-76 [I,A]; C07C0235-84 [I,A]; C08G0018-00 [I,C]; C08G0018-38 [I,A]; C08G0063-00 [I,C]; C08G0063-685 [I,A]; C08G0069-00 [I,C]; C08G0069-44 [I,A]
	ECLA	C07C235/74; C07C235/76; C07C235/84; C08G018/38F5B; C08G063/685; C08G069/44
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EP 1492835	IPCI	C08G0063-685 [ICM,7]; C07C0235-74 [ICS,7]; C07C0235-76 [ICS,7]; C07C0235-84 [ICS,7]
	IPCR	C07C0235-00 [I,C]; C07C0235-74 [I,A]; C07C0235-76 [I,A]; C07C0235-84 [I,A]; C08G0018-00 [I,C]; C08G0018-38 [I,A]; C08G0063-00 [I,C]; C08G0063-685 [I,A]; C08G0069-00 [I,C]; C08G0069-44 [I,A]
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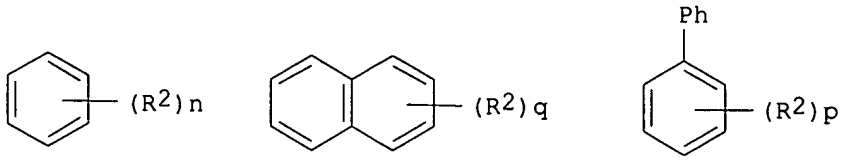
	IPCR	C07C0235-00 [I,C]; C07C0235-74 [I,A]; C07C0235-76 [I,A]; C07C0235-84 [I,A]; C08G0018-00 [I,C]; C08G0018-38 [I,A]; C08G0063-00 [I,C]; C08G0063-685 [I,A]; C08G0069-00 [I,C]; C08G0069-44 [I,A]
	NCL	528/392.000
	ECLA	C07C235/74; C07C235/76; C07C235/84; C08G018/38F5B; C08G063/685; C08G069/44

OS MARPAT 139:308104

GI



I II III

AB Compds. are described, having the following general formula R(CONHCHR1H)m and their use as monomers in polymerization and polycondensation reactions, wherein R = residue obtained by substituting m hydrogen atoms by compound selected from (I), (II), (III), linear or branched C2-18 saturated aliphatic chain, or linear or branched C2-18 with at least one double bond, R2 = linear or branched C1-19 alkyl group when n, p, or q ≥2, n = 0-4, p = 0-6, q = 0-8, R1 = hydrogen, optionally substituted C1-6 alkyl, and m = 2,3, or 4. Thus, maleic diamide (1 equiv, 114.07 g) in 500 g Me alc. and 2.05 equiv formaldehyde in 40% water were agitated at 70° and the mixture was directly injected into a reactor containing Amberliste XE 275 to give a glycol, with a formula HOCH2NHC(:O)CH:CHC(:O)NHCH2OH.

ST arom glycol polyol polycondensation polymn monomer prepn

IT Bottles
Containers
Liquid crystals
Packaging materials
(aromatic glycols and polyols, preparation process and their use as monomers)

IT Polyamides, preparation
Polyesters, preparation
Polyurethanes, preparation
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(aromatic glycols and polyols, preparation process and their use as monomers)

IT 17918-73-9P **33398-02-6P** 609854-73-1P
RL: IMF (Industrial manufacture); PREP (Preparation)
(aromatic glycols and polyols, preparation process and their use as monomers)

IT **50-00-0**, Formaldehyde, reactions **100-52-7**, Benzaldehyde, reactions 628-94-4, Adipic diamide 928-01-8, Maleic diamide **1740-57-4**, Isophthalic acid diamide **3010-82-0**, Terephthalic acid diamide **6183-35-3**, Pyromellitamide **10508-39-1**, Trimellitamide **46711-49-3**, 2,6-Naphthalenedicarboxamide **60541-32-4**, Trimesamide
RL: RCT (Reactant); RACT (Reactant or reagent)
(aromatic glycols and polyols, preparation process and their use as monomers)

IT 100-21-0, Terephthalic acid, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(polycondensation monomers; aromatic glycols and polyols, preparation process and their use as monomers)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

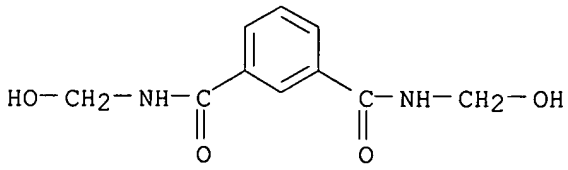
RE

(1) Farbenfabriken Bayer; DE 1002326 B 1957 HCAPLUS
(2) Georg, W; KOLLOID-BEIHEFTE 1933, V37, P378
(3) McGrew, F; US 2364737 A 1944 HCAPLUS

(4) Volkova, L; US 3929731 A 1975 HCAPLUS

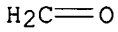
IT **33398-02-6P**
RL: IMF (Industrial manufacture); PREP (Preparation)
(aromatic glycols and polyols, preparation process and their use as monomers)

RN 33398-02-6 HCAPLUS
CN 1,3-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)- (9CI) (CA INDEX NAME)



IT **50-00-0**, Formaldehyde, reactions **100-52-7**, Benzaldehyde, reactions **1740-57-4**, Isophthalic acid diamide **3010-82-0**, Terephthalic acid diamide **6183-35-3**, Pyromellitamide **10508-39-1**, Trimellitamide **46711-49-3**, 2,6-Naphthalenedicarboxamide **60541-32-4**, Trimesamide
RL: RCT (Reactant); RACT (Reactant or reagent)
(aromatic glycols and polyols, preparation process and their use as monomers)

RN 50-00-0 HCAPLUS
CN Formaldehyde (8CI, 9CI) (CA INDEX NAME)



RN 100-52-7 HCAPLUS
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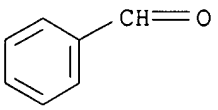

RN 1740-57-4 HCAPLUS
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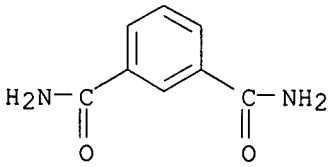

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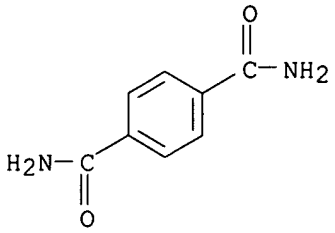

RN 6183-35-3 HCAPLUS
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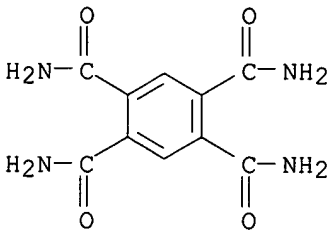

RN 10508-39-1 HCAPLUS
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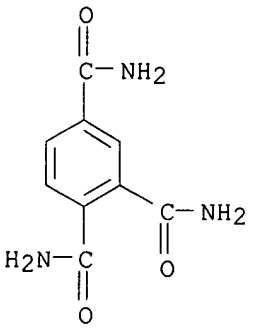

RN 46711-49-3 HCAPLUS
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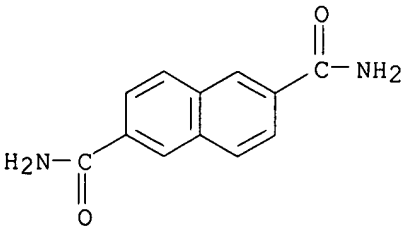

RN 60541-32-4 HCAPLUS
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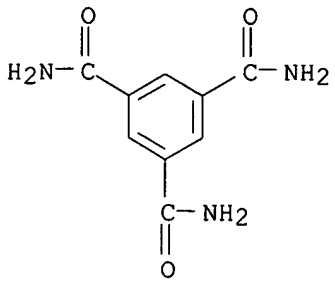

L28 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1986:111377 HCAPLUS
DN 104:111377
ED Entered STN: 05 Apr 1986
TI Aminomethyl-2-amino-1-naphthalenesulfonic acids
IN Stoehr, Frank Michael; Schuendehuette, Karl Heinz
PA Bayer A.-G. , Fed. Rep. Ger.
SO Ger. Offen., 8 pp.
CODEN: GWXXBX
DT Patent
LA German
IC ICM C07C0143-60
CC 41-9 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)
Section cross-reference(s): 25
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3408300	A1	19850912	DE 1984-3408300	19840307
	EP 158073	A1	19851016	EP 1985-102040	19850225
	EP 158073	B1	19870422		
	R: CH, DE, FR, GB, LI				
	JP 60204755	A2	19851016	JP 1985-41357	19850304
	JP 04056827	B4	19920909		
PRAI	DE 1984-3408300	A	19840307		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
DE 3408300	ICM	C07C0143-60
	IPCI	C07C0143-60 [ICM,4]
EP 158073	IPCI	C07C0143-60 [ICM,4]
JP 60204755	IPCI	C07C0143-60 [ICM,4]

OS MARPAT 104:111377
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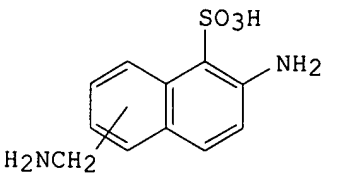

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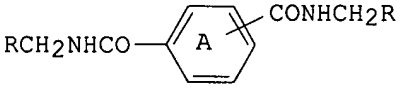


II

AB The title compds. (I) are prepared by treating 2,1-H2NC10H6SO3H or its

N-acyl derivs. with II (R = OH, organic or inorg. acid residue; A may be addnl. substituted) in acid medium followed by saponification Only 0.5 mol II/mol aminonaphthalenesulfonic acid is required. Thus, addition of 109 g 2,1-H2NC10H6SO3H to 60 g p-C6H4(CONHCH2OH)2 in 730 g concentrated H2SO4 at 5-10°, stirring for 12 h at room temperature, neutralization, and saponification of the bisamide in 2 N NaOH at 140° gave 2,5,1-H2N(H2NCH2)C10H5SO3H (95.5% yield, determined by diazotization).

ST aminomethylation Tobias acid; terephthalamide dimethylol agent aminomethylation; methylolterephthalamide agent aminomethylation; aminonaphthalenesulfonic acid aminomethylation

IT Aminomethylation
(of Tobias acid by N,N'-dimethylolterephthalamide)

IT **32445-18-4**
RL: RCT (Reactant); RACT (Reactant or reagent)
(aminomethylation by, of Tobias acid)

IT 81-16-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(aminomethylation of, by dimethylolterephthalamide)

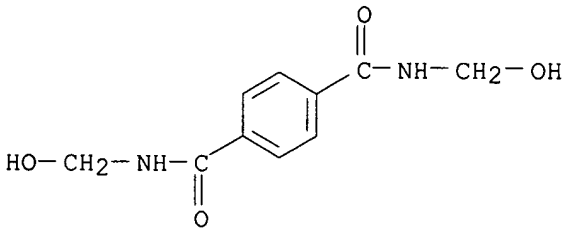
IT **3010-82-0P**
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(preparation and hydrolysis of)

IT 52084-84-1P
RL: IMF (Industrial manufacture); PREP (Preparation)
(preparation of)

IT **32445-18-4**
RL: RCT (Reactant); RACT (Reactant or reagent)
(aminomethylation by, of Tobias acid)

RN 32445-18-4 HCAPLUS

CN 1,4-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)- (9CI) (CA INDEX NAME)



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(preparation and hydrolysis of)

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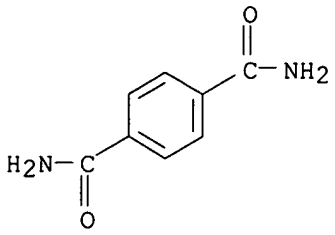

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L10 (         287)SEA FILE=REGISTRY SSS FUL L9
L11               STR
L12 (          23)SEA FILE=REGISTRY SUB=L10 SSS FUL L11
L13             6 SEA FILE=REGISTRY ABB=ON  PLU=ON  L12 AND C10H12N2O4
                ---------

     FILE 'HCAPLUS' ENTERED AT 09:25:35 ON 10 MAY 2006
L14            17 S L13

     FILE 'REGISTRY' ENTERED AT 09:25:49 ON 10 MAY 2006

     FILE 'HCAPLUS' ENTERED AT 09:25:53 ON 10 MAY 2006
                SET SMARTSELECT ON
L15          SEL L14 1- RN :     227 TERMS
                SET SMARTSELECT OFF

     FILE 'REGISTRY' ENTERED AT 09:25:53 ON 10 MAY 2006
L16           227 S L15
L17           221 S L16 NOT L13
L18           143 S L17 AND (46.150.18/RID OR C6-C6/ES)
L19            85 S L18 AND N>=2
L20            47 S L19 AND 1/NC
```

```
L21          41 S L20 AND O>=2
L22           6 S L21 AND (C8H8N2O2 OR C9H9N3O3 OR C10H10N4O4 OR C12H10N2O2)

     FILE 'HCAPLUS' ENTERED AT 09:57:29 ON 10 MAY 2006
L23           2 S L22 AND L14
                SEL RN

     FILE 'REGISTRY' ENTERED AT 09:57:44 ON 10 MAY 2006
L24          17 S E1-E17
L25           9 S L24 NOT L13,L22
L26           2 S L25 AND (C7H6O OR CH2O)

     FILE 'HCAPLUS' ENTERED AT 09:58:41 ON 10 MAY 2006
L27           1 S L26 AND L23
L28           2 S L23,L27

     FILE 'HCAPLUS' ENTERED AT 09:58:56 ON 10 MAY 2006

=>
```

```
=> fil reg
FILE 'REGISTRY' ENTERED AT 09:15:38 ON 10 MAY 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2006 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:    9 MAY 2006  HIGHEST RN 883631-57-0
DICTIONARY FILE UPDATES:   9 MAY 2006  HIGHEST RN 883631-57-0

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

**********************************************************************
*                                                                    *
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added,   *
* effective March 20, 2005.  A new display format, IDERL, is now    *
* available and contains the CA role and document type information. *
*                                                                    *
**********************************************************************

Structure search iteration limits have been increased.  See HELP SLIMITS
for details.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document.  For information
on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=> d sta que 127
L21             STR
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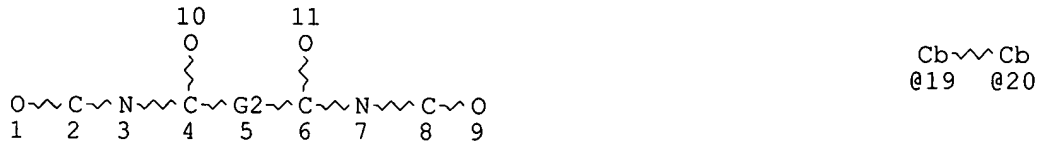


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NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS  13

STEREO ATTRIBUTES: NONE
L23         287 SEA FILE=REGISTRY SSS FUL L21
L24             STR
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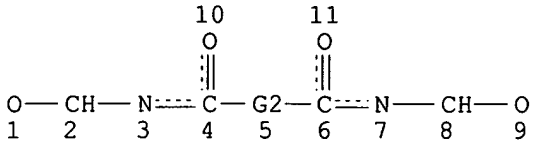


VAR G2=CB/19-4 20-6
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 13

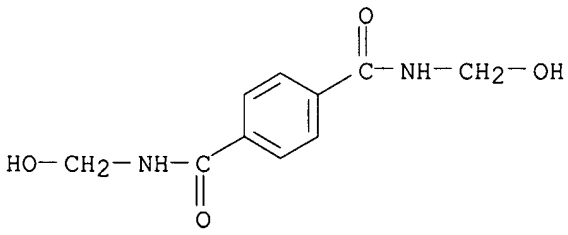
STEREO ATTRIBUTES: NONE
L26 23 SEA FILE=REGISTRY SUB=L23 SSS FUL L24
L27 6 SEA FILE=REGISTRY ABB=ON PLU=ON L26 AND C10H12N2O4

=> d ide can tot l27

L27 ANSWER 1 OF 6 REGISTRY COPYRIGHT 2006 ACS on STN
RN 70158-04-2 REGISTRY
ED Entered STN: 16 Nov 1984
CN 1,4-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)-, polymer with 1,4-bis(ethenyloxy)benzene (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Benzene, 1,4-bis(ethenyloxy)-, polymer with N,N'-bis(hydroxymethyl)-1,4-benzenedicarboxamide (9CI)
MF **(C10 H12 N2 O4 . C10 H10 O2)x**
CI PMS
PCT Polyether, Polyvinyl
LC STN Files: CA, CAPLUS

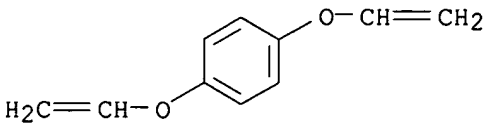
CM 1

CRN 32445-18-4
CMF C10 H12 N2 O4



CM 2

CRN 4024-21-9
CMF C10 H10 O2



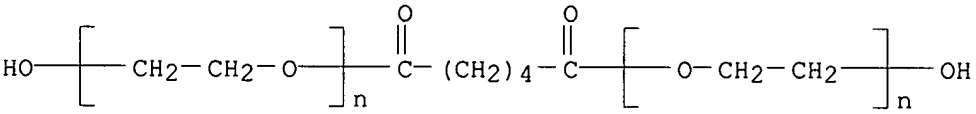
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 90:205546

L27 ANSWER 2 OF 6 REGISTRY COPYRIGHT 2006 ACS on STN
RN 66836-63-3 REGISTRY
ED Entered STN: 16 Nov 1984
CN 1,4-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)-, polymer with α,α'-(1,6-dioxo-1,6-hexanediyl)bis[ω-hydroxypoly(oxy-1,2-ethanediyl)] (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Poly(oxy-1,2-ethanediyl), α,α'-(1,6-dioxo-1,6-hexanediyl)bis[ω-hydroxy-, polymer with N,N'-bis(hydroxymethyl)-1,4-benzenedicarboxamide (9CI)
MF **(C10 H12 N2 O4 . (C2 H4 O)n (C2 H4 O)n C6 H10 O4)x**
CI PMS
PCT Polyether, Polyother
LC STN Files: CA, CAPLUS

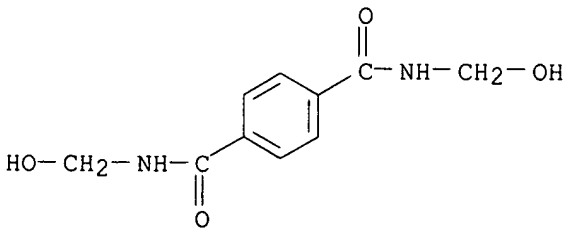
CM 1

CRN 40021-83-8
CMF (C2 H4 O)n (C2 H4 O)n C6 H10 O4
CCI PMS



CM 2

CRN 32445-18-4
CMF C10 H12 N2 O4



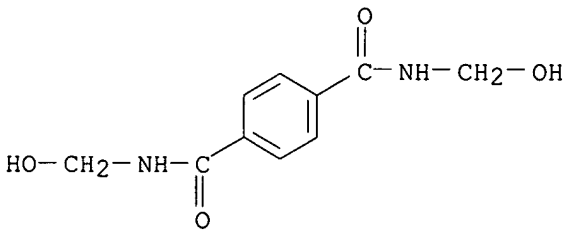
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 89:111185

L27 ANSWER 3 OF 6 REGISTRY COPYRIGHT 2006 ACS on STN
RN 55884-91-8 REGISTRY
ED Entered STN: 16 Nov 1984
CN 1,4-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)-, polymer with 1,1'-[oxybis(2,1-ethanediyloxy)]bis[ethene] (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Ethene, 1,1'-[oxybis(2,1-ethanediyloxy)]bis-, polymer with N,N'-bis(hydroxymethyl)-1,4-benzenedicarboxamide (9CI)
MF **(C10 H12 N2 O4 . C8 H14 O3)x**
CI PMS
PCT Polyother, Polyvinyl
LC STN Files: CA, CAPLUS

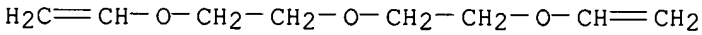
CM 1

CRN 32445-18-4
CMF C10 H12 N2 O4



CM 2

CRN 764-99-8
CMF C8 H14 O3



2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 89:111185

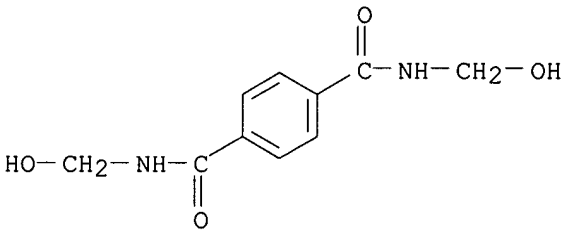
REFERENCE 2: 83:59840

L27 ANSWER 4 OF 6 REGISTRY COPYRIGHT 2006 ACS on STN
RN 55185-42-7 REGISTRY
ED Entered STN: 16 Nov 1984
CN Hexanedioic acid, polymer with N,N'-bis(hydroxymethyl)-1,4-benzenedicarboxamide, 1,2-ethanediol and 1,1'-[oxybis(2,1-ethanediyloxy)]bis[ethene] (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 1,2-Ethanediol, polymer with N,N'-bis(hydroxymethyl)-1,4-benzenedicarboxamide, hexanedioic acid and 1,1'-[oxybis(2,1-ethanediyloxy)]bis[ethene] (9CI)
CN 1,4-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)-, polymer with 1,2-ethanediol, hexanedioic acid and 1,1'-[oxybis(2,1-

ethanediyloxy)]bis[ethene] (9CI)
CN Ethene, 1,1'-[oxybis(2,1-ethanediyloxy)]bis-, polymer with N,N'-bis(hydroxymethyl)-1,4-benzenedicarboxamide, 1,2-ethanediol and hexanedioic acid (9CI)
MF **(C10 H12 N2 O4 . C8 H14 O3 . C6 H10 O4 . C2 H6 O2)x**
CI PMS
PCT Polyamide, Polyester, Polyester formed, Polyvinyl
LC STN Files: CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, USPATFULL

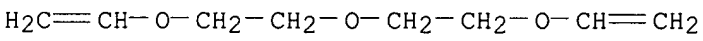
CM 1

CRN 32445-18-4
CMF C10 H12 N2 O4



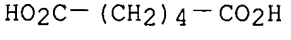
CM 2

CRN 764-99-8
CMF C8 H14 O3



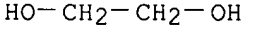
CM 3

CRN 124-04-9
CMF C6 H10 O4



CM 4

CRN 107-21-1
CMF C2 H6 O2



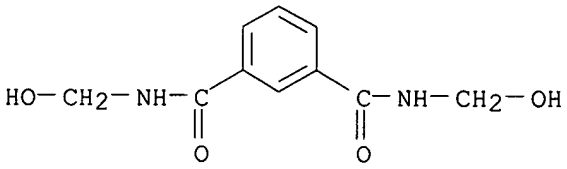
3 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 90:205546

REFERENCE 2: 83:59840

REFERENCE 3: 82:171696

L27 ANSWER 5 OF 6 REGISTRY COPYRIGHT 2006 ACS on STN
RN 33398-02-6 REGISTRY
ED Entered STN: 16 Nov 1984
CN 1,3-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Isophthalamide, N,N'-bis(hydroxymethyl)- (8CI)
OTHER NAMES:
CN N,N'-Bis(hydroxymethyl)-1,3-benzenedicarboxamide
CN N,N'-Bis(hydroxymethyl)isophthalamide
FS 3D CONCORD
MF **C10 H12 N2 O4**
LC STN Files: CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5 REFERENCES IN FILE CA (1907 TO DATE)
5 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 139:308104

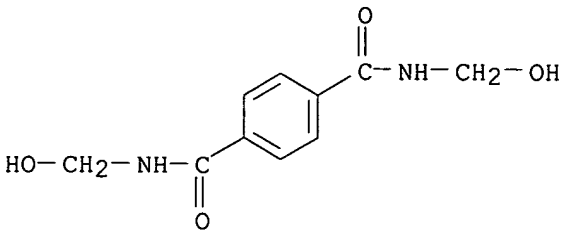
REFERENCE 2: 106:34008

REFERENCE 3: 75:64907

REFERENCE 4: 61:62263

REFERENCE 5: 60:90605

L27 ANSWER 6 OF 6 REGISTRY COPYRIGHT 2006 ACS on STN
RN 32445-18-4 REGISTRY
ED Entered STN: 16 Nov 1984
CN 1,4-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Terephthalamide, N,N'-bis(hydroxymethyl)- (8CI)
OTHER NAMES:
CN Dimethylolterephthalamide
CN N,N'-Bis(hydroxymethyl)terephthalamide
CN N,N'-Dimethylolterephthalamide
FS 3D CONCORD
MF **C10 H12 N2 O4**
CI COM
LC STN Files: BEILSTEIN*, CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, USPATFULL
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

8 REFERENCES IN FILE CA (1907 TO DATE)
8 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 104:111377

REFERENCE 2: 84:137169

REFERENCE 3: 80:71686

REFERENCE 4: 78:91055

REFERENCE 5: 77:68545

REFERENCE 6: 74:149188

REFERENCE 7: 27:52583

REFERENCE 8: 27:52582

=> d his

(FILE 'HOME' ENTERED AT 09:00:51 ON 10 MAY 2006)
SET COST OFF

FILE 'HCAPLUS' ENTERED AT 09:00:59 ON 10 MAY 2006
L1 1 S US20050215761/PN OR (US2004-510409# OR WO2003-EP3665 OR IT200
E CODIGNOLA/AU
L2 41 S E8
E EUROTEC/PA,CS
L3 2 S E69-E76
L4 26 S E90-E127
SEL RN L1

FILE 'REGISTRY' ENTERED AT 09:02:51 ON 10 MAY 2006
L5 14 S E1-E14
L6 1 S L5 AND C10H12N2O4
L7 STR
L8 0 S L7
L9 STR L7
L10 3 S L9
L11 STR L9
L12 0 S L11
L13 STR L11
L14 0 S L13
L15 STR L13

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L16           0 S L15
L17             STR L15
L18           1 S L17
L19             STR L17
L20          13 S L19
L21             STR L19
L22          13 S L21
L23         287 S L21 FUL
                SAV L22 KUMAR510/A
L24             STR L13
L25           1 S L24 SAM SUB=L23
L26          23 S L24 FUL SUB=L23
                SAV L26 KUMAR510A/A
L27           6 S L26 AND C10H12N2O4
L28           6 S L6,L27
                SAV L27 KUMAR510B/A

     FILE 'HCAOLD' ENTERED AT 09:14:12 ON 10 MAY 2006
L29           0 S L28

     FILE 'USPATFULL, USPAT2' ENTERED AT 09:14:14 ON 10 MAY 2006
L30           4 S L28

     FILE 'HCAPLUS' ENTERED AT 09:14:22 ON 10 MAY 2006
L31          17 S L28
L32           1 S L31 AND L1-L4
L33          17 S L31 AND (PY<=2003 OR PRY<=2003 OR AY<=2003)
L34          17 S L31 AND (PY<=2002 OR PRY<=2002 OR AY<=2002)
L35          17 S L31,L32

     FILE 'REGISTRY' ENTERED AT 09:15:38 ON 10 MAY 2006

=> fil uspatall
FILE 'USPATFULL' ENTERED AT 09:16:00 ON 10 MAY 2006
CA INDEXING COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 09:16:00 ON 10 MAY 2006
CA INDEXING COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

=> d l30 bib abs hitstr tot

L30  ANSWER 1 OF 4  USPATFULL on STN
AN     2005:248561  USPATFULL
TI     Aromatic glycols and polyols, preparation process and their use as
       monomers
IN     Codignola, Franco, Milan, ITALY
PI     US 2005215761      A1   20050929
AI     US 2003-510409     A1   20030408 (10)
       WO 2003-EP3665          20030408
                               20041005  PCT 371 date
PRAI   IT 2002-MI734       20020408
DT     Utility
FS     APPLICATION
LREP   HEDMAN & COSTIGAN P.C., 1185 AVENUE OF THE AMERICAS, NEW YORK, NY,
       10036, US
CLMN   Number of Claims: 22
ECL    Exemplary Claim: 1
DRWN   No Drawings
LN.CNT 319
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
```
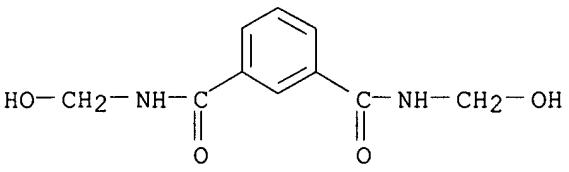

AB Compounds are described, having the following general formula (A) R(CONH--CHR.sub.10H).sub.m (A) and their use as monomers in polymerization and polycondensation reactions.

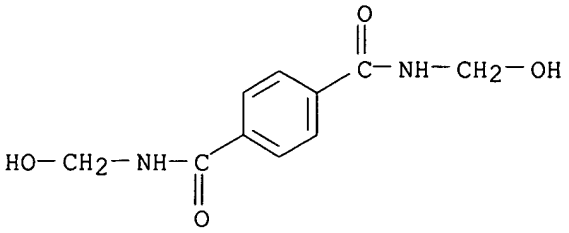
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **33398-02-6P**
(aromatic glycols and polyols, preparation process and their use as monomers)
RN 33398-02-6 USPATFULL
CN 1,3-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)- (9CI) (CA INDEX NAME)



L30 ANSWER 2 OF 4 USPATFULL on STN
AN 76:4918 USPATFULL
TI Dialkyl aromatic amidomethyl phosphonate flame retardants
IN Golborn, Peter, Lewiston, NY, United States
Duffy, James J., Buffalo, NY, United States
PA Hooker Chemicals & Plastics Corporation, Niagara Falls, NY, United States (U.S. corporation)
PI US 3935162 19760127
AI US 1974-531646 19741211 (5)
RLI Division of Ser. No. US 1973-393868, filed on 4 Sep 1973, now patented, Pat. No. US 3895161 which is a division of Ser. No. US 1972-239784, filed on 30 Mar 1972, now patented, Pat. No. US 3803269
DT Utility
FS Granted
EXNAM Primary Examiner: Hoke, V. P.
LREP Casella, Peter F., Crossetta, Jr., William J.
CLMN Number of Claims: 15
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 595
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB New flame retardant materials are disclosed having applied thereto compounds of the formula: ##SPC1##

Wherein R is selected from the group consisting of phenyl, lower alkenyl and halogen substituted and unsubstituted lower alkyl of 1-6 carbon atoms, X is selected from the group consisting of chlorine, bromine and lower alkyl of 1-6 carbon atoms, m is an integer from 1-4 and n is an integer from 0-5, provided that the sum of m and n is not greater than 6 and when m is 1, n is greater than 0.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **32445-18-4**
(reaction of, with trimethyl phosphite)
RN 32445-18-4 USPATFULL
CN 1,4-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)- (9CI) (CA INDEX NAME)



L30 ANSWER 3 OF 4 USPATFULL on STN
AN 75:71621 USPATFULL
TI Process for the production of polymeric acetals containing urethane, carbamide and amide groups
IN Volkova, Leman Mustafa Kyzy, Noginsky raion, p/o Chernogolovka, ulitsa Pervaya, 15, kv. 7, Moskovskaya oblast, USSR
Korolev, Gennady Vladimirovich, Noginsky raion, p/o Chernogolovka, ulitsa Vtoraya, 3, kv. 1, Moskovskaya oblast, USSR
Dubovitsky, Fedor Ivanovich, Vorobievskoe shosse, 2b, kv. 12, Moscow, USSR
Trostyanskaya, Irina Ivanovna, Solnechny pereulok, 4, kv. 5, Gatchina Leningradskoi oblasti, USSR
Rappoport, Leonid Yakovlevich, Grazhdansky prospekt, 105, korpus 4, kv. 57, Leningrad, USSR
Petrov, Gennady Nikolaevich, Zheleznodorozhny pereulok, 7, kv. 35, Leningrad, USSR
Shestakovsky, Mikhail Fedorovich, PROSPEKT Mira, 49, kv. 108, Moscow, USSR
Yakubov, Renat Dovletovich, ULITSA Dimitrova, 81, kv. 14, Temirtau Karagandinskoi oblasti, USSR
Maximov, Sergei Mikhailovich, ULITSA Gertsena, 9, kv. 6, Temirtau Karagandinskoi oblasti, USSR
PI US 3929731 19751230
AI US 1974-483712 19740627 (5)
PRAI SU 1973-1929172 19730628
DT Utility
FS Granted
EXNAM Primary Examiner: Cockeram, H. S.
LREP Steinberg & Blake
CLMN Number of Claims: 29
ECL Exemplary Claim: 1,10
DRWN No Drawings
LN.CNT 831
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A process for the production of polymeric acetals containing urethane, carbamide and amide groups and having the following general formula (1): ##EQU1## WHERE

R is an alkylene ##EQU2##

R' is an alkylene, an arylene, a biarylene, or is absent; ##EQU3## or is absent;

R" is an alkylene, an oxaalkylene, a cycloalkylene, an arylene, or a biarylene;

A has the following general formula (II): ##EQU4## where R"' is chain of a polymeric diol having OH end-groups with a molecular weight of from

500 to 5,000, or is absent;

N IS THE DEGREE OF POLYADDITION EQUAL TO FROM 10 TO 300, PREFERABLY FROM 20 TO 110, WHICH COMPRISES A POLYADDITION REACTION OF DIOLS OF THE FOLLOWING GENERAL FORMULA (III):

HO--R--X--R'--X'--R--OH, (III)

where R, R', X and X' are as in formula (I), or mixtures of said diols of formula (III) with polymeric diols having OH--end-groups of molecular wight of from 500 to 5,000, and divinyl ethers of the following general formula (IV):

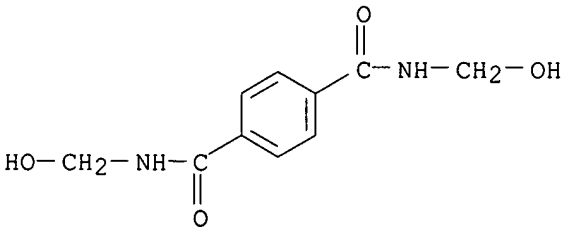
CH.sub.2 = CH--O--R"--O--CH = CH.sub.2,

where R" is as given by formula (I), in the presence of an acid catalyst.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **55185-42-7P**
(manufacture of, catalysts for)
RN 55185-42-7 USPATFULL
CN Hexanedioic acid, polymer with N,N'-bis(hydroxymethyl)-1,4-benzenedicarboxamide, 1,2-ethanediol and 1,1'-[oxybis(2,1-ethanediyloxy)]bis[ethene] (9CI) (CA INDEX NAME)

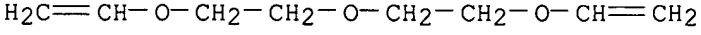
CM 1

CRN 32445-18-4
CMF C10 H12 N2 O4



CM 2

CRN 764-99-8
CMF C8 H14 O3



CM 3

CRN 124-04-9
CMF C6 H10 O4

$HO_2C-(CH_2)_4-CO_2H$

CM 4

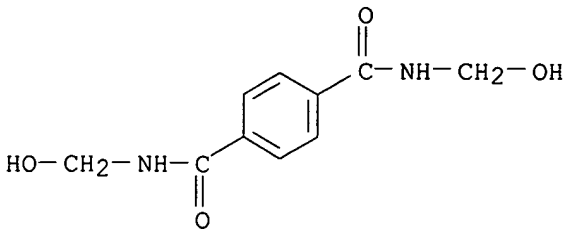
CRN 107-21-1
CMF C2 H6 O2

$HO-CH_2-CH_2-OH$

L30 ANSWER 4 OF 4 USPATFULL on STN
AN 75:36889 USPATFULL
TI Flame retardant materials
IN Golborn, Peter, Lewiston, NY, United States
Duffy, James J., Buffalo, NY, United States
PA Hooker Chemical & Plastics Corporation, Niagara Falls, NY, United States (U.S. corporation)
PI US 3895161 19750715
AI US 1973-393868 19730904 (5)
RLI Division of Ser. No. US 1972-239784, filed on 30 Mar 1972, now patented, Pat. No. US 3803269, issued on 9 Apr 1974
DT Utility
FS Granted
EXNAM Primary Examiner: Husack, Ralph; Assistant Examiner: Davis, Theodore G.
LREP Casella, Peter F., Studley, Donald C., Crossetta, Jr., William J.
CLMN Number of Claims: 19
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 541
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB New flame retardant materials are disclosed having applied thereon compounds of the formula: ##SPC1##

Wherein R is selected from the group consisting of phenyl, lower alkenyl and halogen substituted and unsubstituted lower alkyl of 1-6 carbon atoms, X is selected from the group consisting of chlorine, bromine and lower alkyl of 1-6 carbon atoms, m is an integer from 1-4 and n is an integer from 0-5, provided that the sum of m and n is not greater than 6 and when m is 1, n is greater than 0.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **32445-18-4**
(reaction of, with phosphite esters)
RN 32445-18-4 USPATFULL
CN 1,4-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)- (9CI) (CA INDEX NAME)



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FILE COVERS 1907 - 10 May 2006 VOL 144 ISS 20
FILE LAST UPDATED: 9 May 2006 (20060509/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate
substance identification.

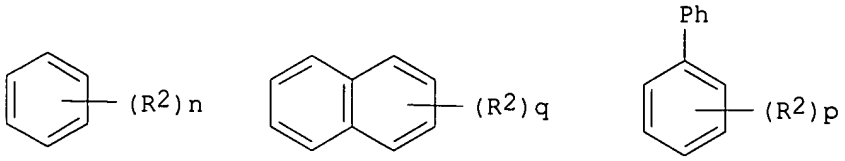
=> d 135 bib abs hitstr retable tot

L35 ANSWER 1 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 2003:818482 HCAPLUS
DN 139:308104
TI Aromatic glycols and polyols, preparation process and their use as monomers
IN **Codignola, Franco**
PA **Eurotecnica Development & Licensing S.p.A, Italy**
SO PCT Int. Appl., 21 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003085026	A1	20031016	WO 2003-EP3665	20030408 <--

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT,

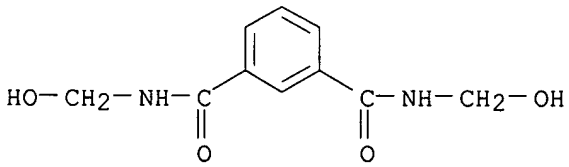
TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
AU 2003229628 A1 20031020 AU 2003-229628 20030408 <--
EP 1492835 A1 20050105 EP 2003-722425 20030408 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
US 2005215761 A1 20050929 US 2004-510409 20041005 <--
PRAI IT 2002-MI734 A 20020408 <--
WO 2003-EP3665 W 20030408 <--
OS MARPAT 139:308104
GI



I II III

AB Compds. are described, having the following general formula R(CONHCHR1H)m and their use as monomers in polymerization and polycondensation reactions, wherein R = residue obtained by substituting m hydrogen atoms by compound selected from (I), (II), (III), linear or branched C2-18 saturated aliphatic chain, or linear or branched C2-18 with at least one double bond, R2 = linear or branched C1-19 alkyl group when n, p, or q ≥2, n = 0-4, p = 0-6, q = 0-8, R1 = hydrogen, optionally substituted C1-6 alkyl, and m = 2,3, or 4. Thus, maleic diamide (1 equiv, 114.07 g) in 500 g Me alc. and 2.05 equiv formaldehyde in 40% water were agitated at 70° and the mixture was directly injected into a reactor containing Amberliste XE 275 to give a glycol, with a formula HOCH2NHC(:O)CH:CHC(:O)NHCH2OH.

IT **33398-02-6P**
RL: IMF (Industrial manufacture); PREP (Preparation)
(aromatic glycols and polyols, preparation process and their use as monomers)
RN 33398-02-6 HCAPLUS
CN 1,3-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)- (9CI) (CA INDEX NAME)



RETABLE

Referenced Author (RAU)	Year (RPY)	VOL (RVL)	PG (RPG)	Referenced Work (RWK)	Referenced File
Farbenfabriken Bayer	1957			DE 1002326 B	HCAPLUS
Georg, W	1933	37	378	KOLLOID-BEIHEFTE	

McGrew, F	1944		US 2364737 A	HCAPLUS
Volkova, L	1975		US 3929731 A	HCAPLUS

L35 ANSWER 2 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1987:34008 HCAPLUS
DN 106:34008
TI Ultraviolet light absorbers of the 2-phenylbenzotriazole type
IN Ozaki, Tatsuhiko; Sugiura, Masato; Sugiura, Fumitoshi
PA Takemoto Oil and Fat Co., Ltd., Japan
SO Eur. Pat. Appl., 20 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 191582	A1	19860820	EP 1986-300687	19860131
	R: DE, FR, GB, IT				
	JP 61176640	A2	19860808	JP 1985-18190	19850131
	CA 1272729	A1	19900814	CA 1986-500695	19860130
PRAI	JP 1985-18190	A	19850131		

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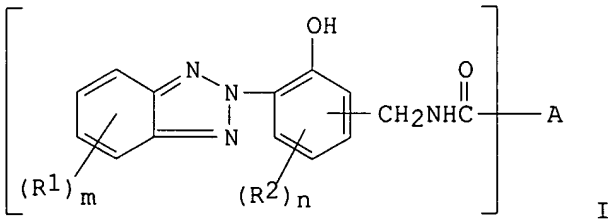
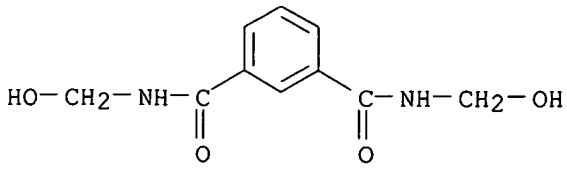


I

AB Compds. I (R1 and R2 = halogen, OH, C1-8 alkyl, or C1-18 alkoxy; A = phenylene, halo-containing phenylene, or naphthylene; m = 0-4, n = 0-3) are prepared for use as UV light absorbers. The absorbers have high vaporization temps. and good weather and thermal resistance and are useful in organic materials as light stabilizers. Thus 45.0 g 2-(2-hydroxy-5-methylphenyl)benzotriazole was dissolved in 300 g 97% H2SO4, cooled to 10°, treated with 22.4 g N,N'-bis(hydroxymethsyl)-1,3-benzenedicarboxamide, and stirred 40 h to give 39.8 g I (m = 0, n = 1, R2 = Me located para to the OH, A = 1,3-phenylene) (II) having m.p. 236-237°, maximum absorption wavelength 341 nm, coefficient of mol. light absorption (using Cl2CHCHCl2) 3.51 + 104, and initial weight loss temps. (at a rate of 10°/min in N) 310°. II was used as a light stabilizer in nylon 6 and poly(ethylene terephthalate).

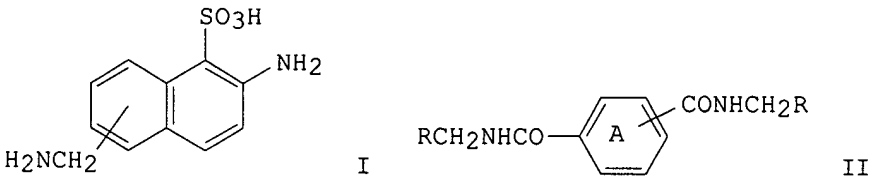
IT **33398-02-6**, N,N'-Bis(hydroxymethyl)-1,3-benzenedicarboxamide
RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation reaction of, with (hydroxymethylphenyl)benzotriazole)
RN 33398-02-6 HCAPLUS
CN 1,3-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)- (9CI) (CA INDEX NAME)



L35 ANSWER 3 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1986:111377 HCAPLUS
DN 104:111377
TI Aminomethyl-2-amino-1-naphthalenesulfonic acids
IN Stoehr, Frank Michael; Schuendehuette, Karl Heinz
PA Bayer A.-G. , Fed. Rep. Ger.
SO Ger. Offen., 8 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

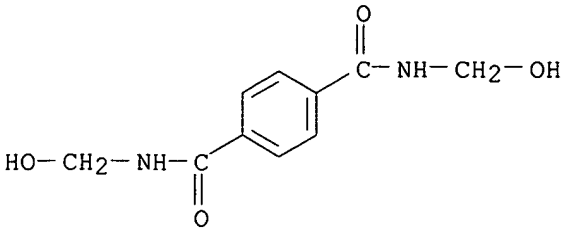
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3408300	A1	19850912	DE 1984-3408300	19840307
	EP 158073	A1	19851016	EP 1985-102040	19850225
	EP 158073	B1	19870422		
	R: CH, DE, FR, GB, LI				
	JP 60204755	A2	19851016	JP 1985-41357	19850304
	JP 04056827	B4	19920909		
PRAI	DE 1984-3408300	A	19840307		

OS MARPAT 104:111377
GI



I II

AB The title compds. (I) are prepared by treating 2,1-H2NC10H6SO3H or its N-acyl derivs. with II (R = OH, organic or inorg. acid residue; A may be addnl. substituted) in acid medium followed by saponification Only 0.5 mol II/mol aminonaphthalenesulfonic acid is required. Thus, addition of 109 g 2,1-H2NC10H6SO3H to 60 g p-C6H4(CONHCH2OH)2 in 730 g concentrated H2SO4 at 5-10°, stirring for 12 h at room temperature, neutralization, and saponification of the bisamide in 2 N NaOH at 140° gave 2,5,1-H2N(H2NCH2)C10H5SO3H (95.5% yield, determined by diazotization).
IT **32445-18-4**
RL: RCT (Reactant); RACT (Reactant or reagent)
(aminomethylation by, of Tobias acid)
RN 32445-18-4 HCAPLUS
CN 1,4-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)- (9CI) (CA INDEX NAME)



L35 ANSWER 4 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1979:205546 HCAPLUS
DN 90:205546
TI Polyacetals
PA Institute of Chemical Physics, Chernogolovka, USSR; All-Union Scientific-Research Institute of Synthetic Rubber; Karaganda Synthetic Rubber Plant
SO Jpn. Tokkyo Koho, 13 pp.
CODEN: JAXXAD
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 53047159	B4	19781219	JP 1974-74187	19740628
	JP 51017300	A2	19760212		
PRAI	JP 1974-74187	A	19740628		

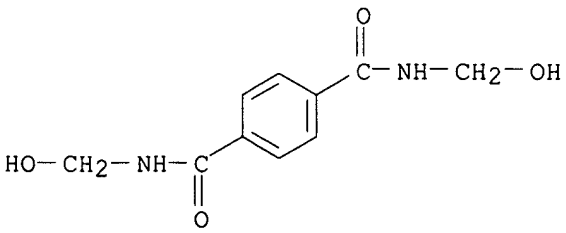
AB Polyacetals containing urethane, urea, and/or amide groups were prepared by treating vinyl ethers with hydroxyalkyl carbamates, methylolurea, and/or methylolated carboxamides. Thus, 31.2 g bis(2-hydroxyethyl) 2,4-xylylenedicarbamate [70158-36-0], dried at 80°/1 mm for 1 h, was treated with 11.4 g CH2:CHOCH2CH2OCH:CH2 in the presence of 0.47 g 4-MeC6H4SO3H at 60° for 2 h to give 40 g copolymer [70163-95-0] having glass transition temperature -10° which formed elastic films and fibers.

IT **70158-04-2P**
RL: IMF (Industrial manufacture); PREP (Preparation)
(preparation of)

RN 70158-04-2 HCAPLUS
CN 1,4-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)-, polymer with 1,4-bis(ethenyloxy)benzene (9CI) (CA INDEX NAME)

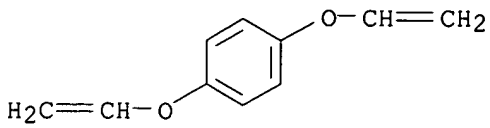
CM 1

CRN 32445-18-4
CMF C10 H12 N2 O4



CM 2

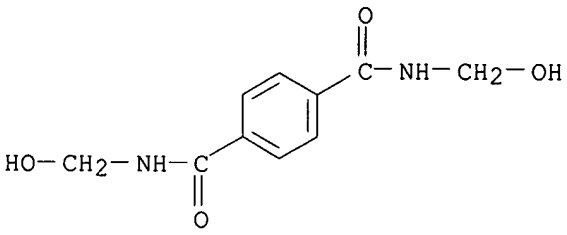
CRN 4024-21-9
CMF C10 H10 O2



IT **55185-42-7**
RL: USES (Uses)
(rubber)
RN 55185-42-7 HCAPLUS
CN Hexanedioic acid, polymer with N,N'-bis(hydroxymethyl)-1,4-benzenedicarboxamide, 1,2-ethanediol and 1,1'-[oxybis(2,1-ethanediyloxy)]bis[ethene] (9CI) (CA INDEX NAME)

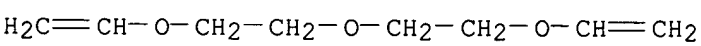
CM 1

CRN 32445-18-4
CMF C10 H12 N2 O4



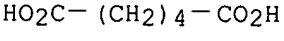
CM 2

CRN 764-99-8
CMF C8 H14 O3



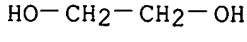
CM 3

CRN 124-04-9
CMF C6 H10 O4



CM 4

CRN 107-21-1
CMF C2 H6 O2



L35 ANSWER 5 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1978:511185 HCAPLUS
DN 89:111185
TI Polymeric acetals containing urethane, carbamide and amide groups
IN Volkova, L. M.; Korolev, G. V.; Dubovitskii, F. I.; Trostyanskaya, I. I.; Rappoport, L. Ya.; Petrov, G. N.; Shestakovskii, M. F.; Yakubov, R. D.; Maksimov, S. M.
PA Institute of Chemical Physics, Chernogolovka, USSR; All-Union Scientific-Research Institute of Synthetic Rubber; Karaganda Synthetic Rubber Plant
SO Can., 47 pp.
CODEN: CAXXA4
DT Patent
LA English
FAN.CNT 4

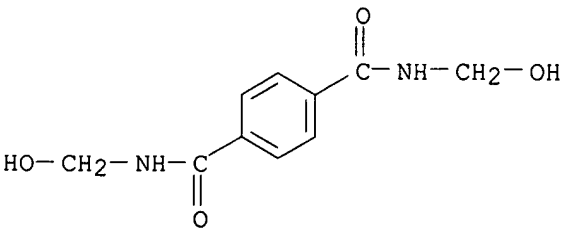
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CA 1027696	A1	19780307	CA 1974-203533	19740626
	SU 518506	T	19760625	SU 1973-1929172	19730628
PRAI	SU 1973-1929172	A	19730628		

AB Acetal polymers containing urethane, urea, and amide linkages were prepared having good flexibility, elasticity, and heat stability. Thus, dried 2,4-xylylenebis(2-hydroxyethyl)carbamate 31.2, ethylene glycol divinyl ether 11.4, and p-toluenesulfonic acid 0.47 g were heated 2 h at 60° to give a copolymer [66822-52-4] having intrinsic viscosity 0.31 which could be converted to elastic films and fibers.

IT **55884-91-8P 66836-63-3P**
RL: PREP (Preparation)
(preparation of flexible heat-resistant)
RN 55884-91-8 HCAPLUS
CN 1,4-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)-, polymer with 1,1'-[oxybis(2,1-ethanediyloxy)]bis[ethene] (9CI) (CA INDEX NAME)

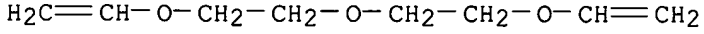
CM 1

CRN 32445-18-4
CMF C10 H12 N2 O4



CM 2

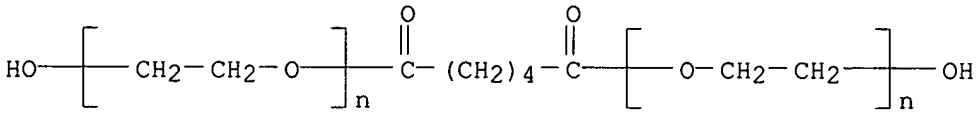
CRN 764-99-8
CMF C8 H14 O3



RN 66836-63-3 HCAPLUS
CN 1,4-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)-, polymer with α,α'-(1,6-dioxo-1,6-hexanediyl)bis[ω-hydroxypoly(oxy-1,2-ethanediyl)] (9CI) (CA INDEX NAME)

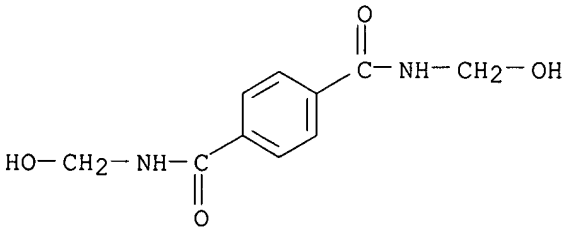
CM 1

CRN 40021-83-8
CMF (C2 H4 O)n (C2 H4 O)n C6 H10 O4
CCI PMS



CM 2

CRN 32445-18-4
CMF C10 H12 N2 O4



L35 ANSWER 6 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1976:137169 HCAPLUS
DN 84:137169
TI Dialkyl aromatic amidomethyl phosphonate flame retardants
IN Golborn, Peter; Duffy, James J.
PA Hooker Chemicals and Plastics Corp., USA
SO U.S., 10 pp. Division of U.S. 3,895,161.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 5

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3935162	A	19760127	US 1974-531646	19741211
	US 3803269	A	19740409	US 1972-239784	19720330
	US 3895161	A	19750715	US 1973-393868	19730904
PRAI	US 1972-239784	A3	19720330		

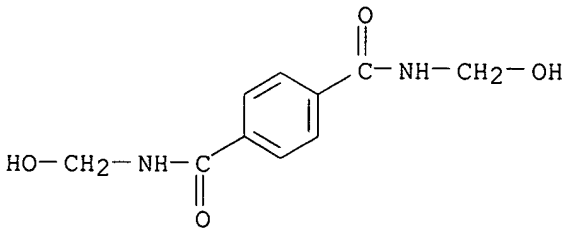
US 1973-393868 A3 19730904

AB Dialkyl aromatic amidoethyl phosphates, added in relatively small amts. to textiles, thermoplastics, or thermosetting resins, produced satisfactory flame retardant compns. with no problems of recrystn. or oiling-out. Thus, rayon staple fiber was padded to a 100% wet pickup with a solution containing N-[(dimethylphosphono)methyl]-p-toluamide [51304-12-2] 25, 40% formalin 37.5, NH4Cl 3.1, and 50% solution of methylolated melamine 14.0 g at pH 7, dried 3 min at 250°F and cured 10 min at 350°F. The treated samples self-extinguished immediately in flammability tests while untreated samples were completely consumed; the flame retardancy was retained after 5 home washes.

IT **32445-18-4**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with trimethyl phosphite)

RN 32445-18-4 HCAPLUS

CN 1,4-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)- (9CI) (CA INDEX NAME)



L35 ANSWER 7 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1975:459840 HCAPLUS

DN 83:59840

TI Polyacetals

PA Institute of Chemical Physics, Chernogolovka, USSR; All-Union Scientific-Research Institute of Synthetic Rubber; Karaganda Synthetic Rubber Plant

SO Neth. Appl., 27 pp.
CODEN: NAXXAN

DT Patent

LA Dutch

FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	NL 7408640	A	19741231	NL 1974-8640	19740627
	NL 159686	B	19790315		
	SU 518506	T	19760625	SU 1973-1929172	19730628
PRAI	SU 1973-1929172	A	19730628		

AB Polyacetals containing urylene, NHCO2, or NHCO groups were prepared from diols containing these groups and divinyl ethers. Thus, 31.2 g 2,4-xylylenebis(2-hydroxyethyl carbamate) was dried, mixed with 11.4 g ethylene glycol divinyl ether and 0.47 g p-toluenesulfonic acid, and heated 2 hr at 60°, giving 40 g yellowish-white flexible polymer [55219-72-2] which had intrinsic viscosity 0.31 and glass temperature -10° and could be formed into elastic films and fibers.

IT **55185-42-7P 55884-91-8P**
RL: PREP (Preparation)
(preparation of)

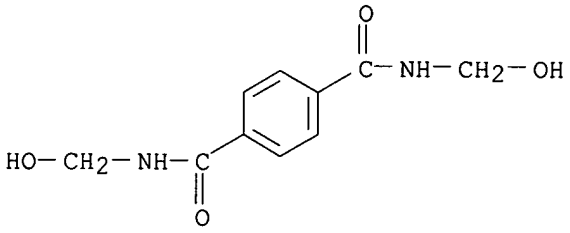
RN 55185-42-7 HCAPLUS

CN Hexanedioic acid, polymer with N,N'-bis(hydroxymethyl)-1,4-benzenedicarboxamide, 1,2-ethanediol and 1,1'-[oxybis(2,1-

ethanediyloxy)]bis[ethene] (9CI) (CA INDEX NAME)

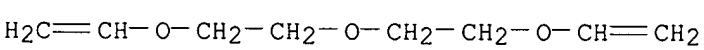
CM 1

CRN 32445-18-4
CMF C10 H12 N2 O4



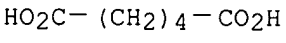
CM 2

CRN 764-99-8
CMF C8 H14 O3



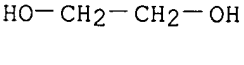
CM 3

CRN 124-04-9
CMF C6 H10 O4



CM 4

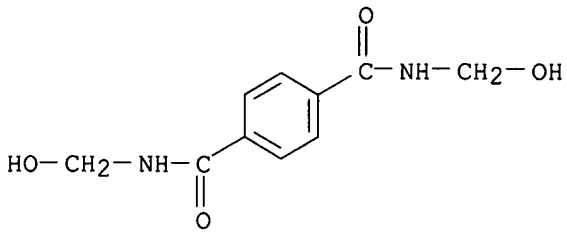
CRN 107-21-1
CMF C2 H6 O2



RN 55884-91-8 HCAPLUS
CN 1,4-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)-, polymer with 1,1'-[oxybis(2,1-ethanediyloxy)]bis[ethene] (9CI) (CA INDEX NAME)

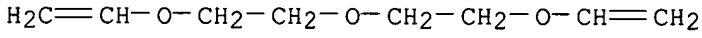
CM 1

CRN 32445-18-4
CMF C10 H12 N2 O4



CM 2

CRN 764-99-8
CMF C8 H14 O3



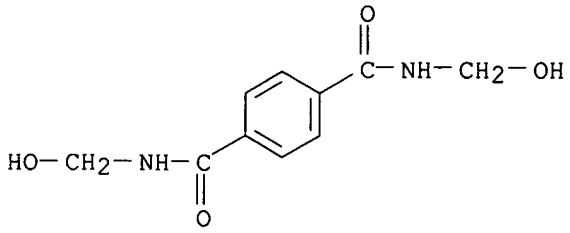
L35 ANSWER 8 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1975:171696 HCAPLUS
DN 82:171696
TI Acetal polymers containing urethane, carbamide, and amide groups
IN Volkova, L. M.; Korolev, G. V.; Dubovitskii, F. I.; Trostyanskaya, I. I.; Rappoport, L. Ya.; Petrov, G. N.; Shestakovskii, M. F.; Yakubov, R. D.; Maksimov, S. M.
PA Institute of Chemical Physics, Chernogolovka; All-Union-Scientific Research Institute of Synthetic Rubber; Karaganda Synthetic Rubber Plant
SO Ger. Offen., 38 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 4

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2431032	A1	19750116	DE 1974-2431032	19740627
	DE 2431032	C2	19830922		
	SU 518506	T	19760625	SU 1973-1929172	19730628
PRAI	SU 1973-1929172	A	19730628		

AB The polymerization of carbamates with glycols and vinyl ethers in the presence of acid catalysts gave amide and urethane containing polyacetals having elastic and strength properties of polyurethanes and polyamides. Thus, a mixture of dry bis(2-hydroxyethyl) 4-methyl-m-phenylenedicarbamate 31.2, 1,2-bis(vinyloxy)ethane 11.4, and p-toluenesulfonic acid [104-15-4] 0.47 g was stirred for 2 hr at 60° to give 40 g yellowish white copolymer [55219-72-2] with 0.31 inherent viscosity, and -10° freezing temperature
IT **55185-42-7P**
RL: IMF (Industrial manufacture); PREP (Preparation)
(manufacture of, catalysts for)
RN 55185-42-7 HCAPLUS
CN Hexanedioic acid, polymer with N,N'-bis(hydroxymethyl)-1,4-benzenedicarboxamide, 1,2-ethanediol and 1,1'-[oxybis(2,1-ethanediyloxy)]bis[ethene] (9CI) (CA INDEX NAME)

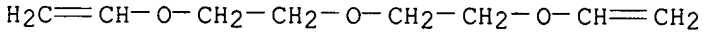
CM 1

CRN 32445-18-4
CMF C10 H12 N2 O4



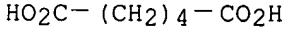
CM 2

CRN 764-99-8
CMF C8 H14 O3



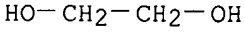
CM 3

CRN 124-04-9
CMF C6 H10 O4



CM 4

CRN 107-21-1
CMF C2 H6 O2



L35 ANSWER 9 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1974:71686 HCAPLUS
DN 80:71686
TI Phosphoric acid derivatives as flame proofing agents for textiles and thermoplastic, thermosetting or elastomeric synthetic resins
IN Duffy, James J.; Golborn, Peter
PA Hooker Chemical Corp.
SO Ger. Offen., 41 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 5

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2316043	A1	19731018	DE 1973-2316043	19730330

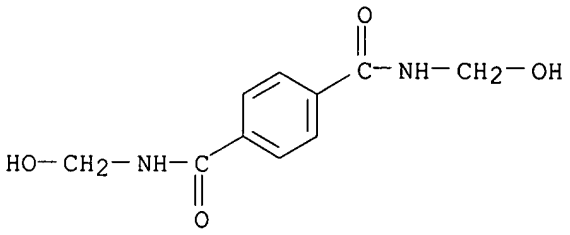
	US 3803269	A	19740409	US 1972-239784	19720330
	US 3823206	A	19740709	US 1972-239793	19720330
PRAI	US 1972-239784	A	19720330		
	US 1972-239793	A	19720330		

AB The compds. [(RO)2P(O)CH2NHCO)nZ (R = Ph, alkyl, alkenyl, haloalkyl; Z = alkylene, haloarylene; n = 1-4) are flame retardants resistant to crystallization and migration. Thus, addition over 5 min of 57.5 g 3-bromo-N-(hydroxymethyl)benzamide [51053-05-5] to 124 g trimethyl phosphite [121-45-9] at 100.deg. and heating 3 hr at 95.deg. gives 81 g dimethyl [(m-bromobenzamido)methyl]phosphonate (I) [51053-06-6] as an oil. ABS polymer [9003-56-9] containing 30% I has O index (ASTM D 2863-70) 24 and flammability rating (ASTM D 635-68) NB.

IT **32445-18-4**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with phosphite esters)

RN 32445-18-4 HCAPLUS

CN 1,4-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)- (9CI) (CA INDEX NAME)



L35 ANSWER 10 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1973:91055 HCAPLUS

DN 78:91055

TI Photosensitive copying material

PA Kalle A.-G.

SO Fr., 23 pp.
CODEN: FRXXAK

DT Patent

LA French

FAN.CNT 2

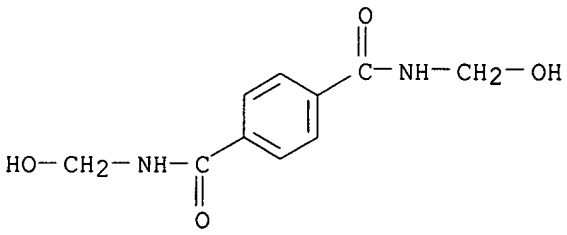
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2115948	A5	19720707	FR 1971-41828	19711123
	DE 2057473	A	19720525	DE 1970-2057473	19701123
	DE 2057473	C2	19820408		
PRAI	DE 1970-2057473	A	19701123		

AB The title material is coated with a mixture of a light-sensitive diazonium compound, a crosslinking agent, and a binder. Imagewise exposure produces hardening of the coating in the exposed areas, while the coating in unexposed areas can be removed by washing with H2O. Suitable diazonium compds. have 2 benzene rings linked together by a simple bond or -O-, -S-, -NH-, or -CONH- groups. Particularly suitable are 3-methyldiphenylamine-4-diazonium and 3-methoxydiphenylamine-4-diazonium salts. Suitable crosslinking agents are methylol derivs. Suitable binders are those which are soluble in H2O or exhibit swelling in contact with H2O, e.g. poly(vinyl alc.), partially hydrolyzed poly(vinyl acetate), Me cellulose, etc. Thus, a polyamide screen was coated with a mixture of 25 g hydroxyethyl cellulose, 3 g diphenylamine-4-diazonium sulfate, 8 ml of a 2% solution of dimethylolpropyleneurea (tetrahydro-1,3-bis(hydroxymethyl)-2-(1H)-

pyrimidinone), and 200 ml H2O. The material was dried at 30-50°, imagewise exposed to uv through a diapositive, and washed with H2O. A serigraphic plate suitable for printing was obtained.

IT **32445-18-4**
RL: MOA (Modifier or additive use); USES (Uses)
(crosslinking agent, for photosensitive diazonium compns. for serigraphic printing stencils)

RN 32445-18-4 HCAPLUS
CN 1,4-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)- (9CI) (CA INDEX NAME)



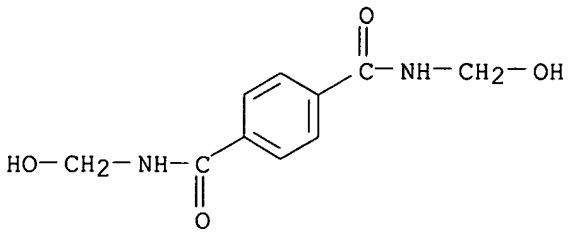
L35 ANSWER 11 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1972:468545 HCAPLUS
DN 77:68545
TI Light-sensitive copying material
IN Steppan, Hartmut; Ruckert, Hans; Reichel, Maximilian Karl
PA Kalle A.-G.
SO Ger. Offen., 43 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2057473	A	19720525	DE 1970-2057473	19701123
	DE 2057473	C2	19820408		
	FR 2115948	A5	19720707	FR 1971-41828	19711123
	JP 54037488	B4	19791115	JP 1971-94399	19711124
PRAI	DE 1970-2057473	A	19701123		

AB The light-sensitive copying material of good tanning action, developable by H2O, and useful for silk-screen printing, consisted of an aromatic diazonium salt, e.g. 4-anilinobenzenediazonium sulfate (I) or its 2-methoxy derivative capable of condensation, ≥1 binder, e.g. hydroxyethyl cellulose (II), poly(vinyl alc.), or poly(vinyl acetate), and ≥1 crosslinking compound of the type dimethylolpropyleneurea (III), 2,4,6-trimethylolphenol, N,N'-dimethylolterephthalamide, or N,N'-dimethyloldithiodiacetamide. Thus, a polyamide silk-screen textile was coated with a solution consisting of 25 parts II, 3 parts I, and 8 parts by volume 2% III in 200 parts by volume H2O, dried at 30-50°, exposed behind a pattern for 5 min to the uv radiation of C arc lamp, and developed by H2O to give silk-screen form of good strength.

IT **32445-18-4**
RL: USES (Uses)
(photosensitive compns. containing diazonium compds. and, for silk-screen stencils)

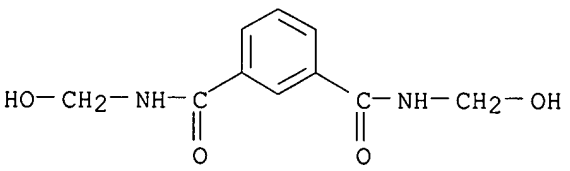
RN 32445-18-4 HCAPLUS
CN 1,4-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)- (9CI) (CA INDEX NAME)



L35 ANSWER 12 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1971:464907 HCAPLUS
DN 75:64907
TI Poly(oxymethylene) copolymers stabilized with 3,5-diamino-1,2,4-triazole
IN Gerlach, Dieter; Bader, Erich
PA Deutsche Gold- und Silber-Scheideanstalt vorm. Roessler
SO U.S., 3 pp.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3585165	A	19710615	US 1969-793555	19690123
	DE 1694005	A	19720309	DE 1968-D55204	19680127
PRAI	DE 1968-D55204	A	19680127		

AB 3,5-Diamino-1,2,4-triazole (I) is incorporated with trioxane-1,3-dioxepane block copolymer (II) or trioxanedioxolane copolymer to improve their heat resistance. Trioxane was block copolymd. with 3% 1,3-dioxepane in the presence of Me3CClO4, II hydrolyzed, the product mixed at 180° with 0.2% 2,2-methylenebis(4-methyl-6-tert-butylphenol) and 0.8% I to give a product with improved heat resistance.
IT **33398-02-6**
RL: USES (Uses)
(reaction products with imidazolidinone, stabilizers)
RN 33398-02-6 HCAPLUS
CN 1,3-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)- (9CI) (CA INDEX NAME)



L35 ANSWER 13 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1971:149188 HCAPLUS
DN 74:149188
TI Light-sensitive condensation products of aromatic diazonium salts for use in preparing copying material
IN Steppan, Hartmut
PA Kalle A.-G.
SO Ger. Offen., 242 pp.
CODEN: GWXXBX
DT Patent
LA German

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 2024242	A	19701217	DE 1970-2024242	19700519
	DE 2024242	C2	19840920		
	NL 7006716	A	19701124	NL 1970-6716	19700508
	NL 174835	B	19840316		
	NL 174835	C	19840816		
	SE 386435	B	19760809	SE 1970-6692	19700515
	SU 660590	D	19790430	SU 1970-1435301	19700515
	ES 379775	A1	19730201	ES 1970-379775	19700518
	PL 92450	P	19770430	PL 1970-140707	19700518
	IL 34548	A1	19850430	IL 1970-34548	19700518
	ZA 7003394	A	19710630	ZA 1970-3394	19700519
	GB 1312926	A	19730411	GB 1970-24219	19700519
	AT 763971	A	19750415	AT 1971-7639	19700519
	CA 971160	A1	19750715	CA 1970-83040	19700519
	NO 133756	B	19760315	NO 1970-1905	19700519
	FI 53896	B	19780502	FI 1970-1393	19700519
	CH 607098	A	19781130	CH 1970-7389	19700519
	DK 143621	B	19810914	DK 1970-2535	19700519
	DK 143621	C	19820215		
	BE 750693	A	19701120	BE 1970-750693	19700520
	FR 2048537	A5	19710319	FR 1970-18227	19700520
	JP 49045323	B4	19741203	JP 1970-42826	19700520
	US 3849392	A	19741119	US 1972-224324	19720207
PRAI	US 1969-826296	A	19690520		

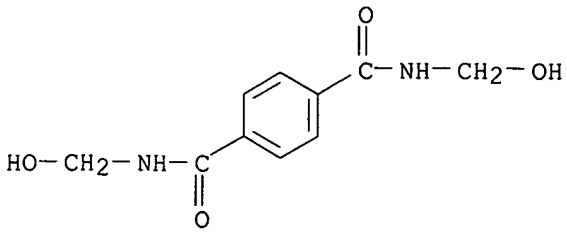
GI For diagram(s), see printed CA Issue.

AB An aromatic diazonium compound I, where R is C1-5 alkyl and X is the anion of the diazonium compound, is condensed in a strongly acid medium with II, where M is a single element, an alkylene chain or -oxyalkyleneoxy-, oxyalkyleneoxyalkyleneoxy-, -oxyaryleneoxy-, -O-, or -S-; R1 and R2 are H, C1-3 alkyl, C1-3 alkoxy, or a halogen; t and u = 1 to 4. As a condensation medium, H3PO4, H2SO4, or MeSO3H, 70-100% concentration, may be used at 10-70°. E.g., 4-methoxydiphenylamine-4'-diazonium sulfate (91%) 17.75 g is dissolved in 150 ml 86% H3PO4. Dimethylolterephthaamide 11.2 g, fine powder, is added with vigorous stirring and the mixture is condensed 21 hr at room temperature The raw condensate is dissolved in 1 l. H2O at 40° and the condensate is extracted with 200 ml 50% ZnCl2. The double salt is dissolved in 500 ml H2O at 50° and is precipitated again with ZnCl2 to give 26.8 g product. The condensate is mixed with pigment, such as Crystal Violet, dissolved in ethylene glycol monomethyl ether, coated on paper, Al foil, or on a metal plate, dried, exposed to an image under an arc lamp and developed in a mixture of water, Na lauryl sulfate, tartaric acid, and benzyl alc.

IT **32445-18-4**
RL: USES (Uses)
(reaction products with aromatic diazonium salts, light-sensitive compns. containing, for photoduplication)

RN 32445-18-4 HCAPLUS

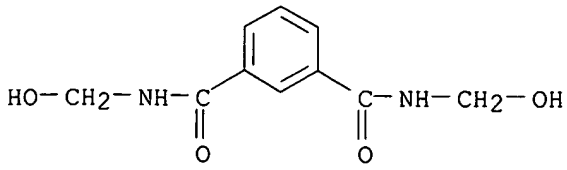
CN 1,4-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)- (9CI) (CA INDEX NAME)



L35 ANSWER 14 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1964:462263 HCAPLUS
DN 61:62263
OREF 61:10841h,10842a-b
TI Thermoplastic molding composition containing high-molecular-weight polyformaldehyde and nitrogen compounds
IN Schmidt, Franz; Schwarz, Erich
PA Badische Anilin- & Soda-Fabrik A.-G.
SO 4 pp.
DT Patent
LA Unavailable
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 1173245		19640702	DE 1961-B63389	19610725

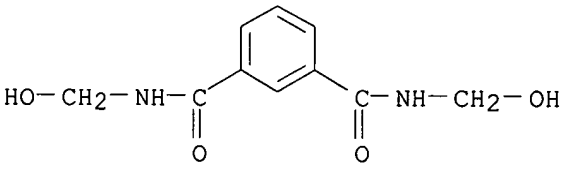
AB A molding composition stabilized against heat and O can be obtained by mixing together polyformaldehyde (I) with stabilized end-groups and oligomeric N compds. consisting of a product obtained by melting together (A) a dicarboxylic acid diamide hydroxymethylated at both N atoms with (B) a carboxylic acid amide containing 2 carboxamide groups having an alkyl, aryl, or aralkyl group linked to N, or urea or derivative thereof, or mixture of these compds. The molar ratio of A to B varies from 1.2: 1 to 1:1.2, preferably 1:1, if the N atoms of the carboxylic acid amides are unsubstituted; and varies from 3:1 to 1:1 if substituted N atoms are used. If urea or derivative is used A to B varies from 2:1 to 1:2. As costabilizers phenolic antioxidants can be added, such as 2,2'-methylenebis(4-ethyl-6-tert-butylphenol). Thus, 20.2 parts pulverized N,N'-bis(hydroxymethyl)isophthalamide and 18.6 parts pulverized azelaamide (mole ratio 0.9:1) were heated at 220° in a tube under N during 20-40 min. After allowing water vapor and HCHO to escape from the melt, cooling down under N, and grinding, a clear yellow product, m. 170-95°, was obtained. Then 20 g. acetylated I, 0.3% by weight benzaldehyde 1-methyl-1-phenylhydrazone, and 1.5% by weight of yellow product were mixed in a ball mill. After heating at 222° during 80 min., the stabilized I had a weight loss of 4.3-5.2% (unstabilized I showed a weight loss of 55-65%).
IT **33398-02-6**, Isophthalamide, N,N'-bis(hydroxymethyl)-
(reaction product with azelaamide, as stabilizer for polyoxymethylenes)
RN 33398-02-6 HCAPLUS
CN 1,3-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)- (9CI) (CA INDEX NAME)



L35 ANSWER 15 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1964:90605 HCAPLUS
DN 60:90605
OREF 60:15788e-g
TI Paraformaldehyde stabilizers
IN Schmidt, Franz; Schwartz, Erich
PA Badische Anilin- & Soda-Fabrik A.-G.
SO 14 pp.
DT Patent
LA Unavailable

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
BE 626989		19630710	BE	19630110

AB Paraformaldehyde can be stabilized by reaction products of the N,N'dihydroxymethylisophthalamide (I) with the diamides of dicarboxylic acids. Thus, I 20.2 and sebacamide (II) 20 parts is heated to 220° under N during 20-40 min. to give a product (III) m. 175-205°. The stabilizing effect is shown by the following comparison. Paraformaldehyde acetylated (20 g.) and 0.3% PhCH:NNMePh are mixed in a ball mill with 1.5% III, and the mixture is heated in air at 222 ° for 80 min.; loss in weight, 5%. With 2% II instead of III, loss in weight is 12-14%. Without any stabilizer, the weight loss is 55-65%. N,N'-Diacetylethylenediamine, biuret, and azelaic acid diamide were also used instead of II.
IT **33398-02-6**, Isophthalamide, N,N'-bis(hydroxymethyl)-
(reaction products with amides, as stabilizers for polyoxymethylenes)
RN 33398-02-6 HCAPLUS
CN 1,3-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)- (9CI) (CA INDEX NAME)



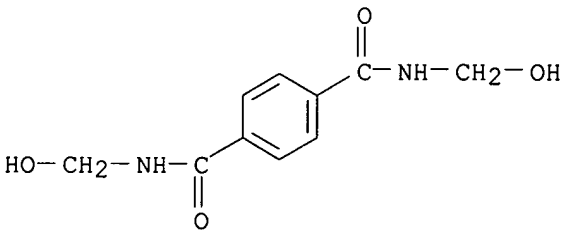
L35 ANSWER 16 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN
AN 1933:52583 HCAPLUS
DN 27:52583
OREF 27:4698c-d
TI The constitution of artificial resins. IV. Resins from aryl sulfonamido carboxylic acid amides and the products obtained from aryl dicarboxylic acid amides
AU Walter, Georg; Storfer, Ernst
SO Kolloid-Beihefte (1933), 37, 378-84
CODEN: KOBEAN; ISSN: 0368-6345
DT Journal
LA Unavailable

AB Hardenable resins are obtained from aryl sulfonamido carboxylic acid amides (e. g., p-H2NSO2C6H4CONH2) by condensation with CH2O. They are hydrophilic, whereas the sulfonamide resins themselves are hydrophobic. Aryl dicarboxylic acid diamides do not resinify when treated with CH2O. From terephthalic acid diamide, for example, a crystalline dimethylol compound, CH2(OH)NHCOC6H4CONHCH2OH, m. 331-3°, was obtained, which could not be resinified.

IT **32445-18-4**, Terephthalamide, N,N'-bis(hydroxymethyl)- (preparation of)

RN 32445-18-4 HCAPLUS

CN 1,4-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)- (9CI) (CA INDEX NAME)



L35 ANSWER 17 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1933:52582 HCAPLUS

DN 27:52582

OREF 27:4698a-c

TI The constitution of artificial resins. III. Hardenable and unhardenable arylsulfonamide-formaldehyde resins and the question of hardenability in general

AU Walter, Georg; Gluck, Andreas

SO Kolloid-Beihefte (1933), 37, 343-77
CODEN: KOBEAN; ISSN: 0368-6345

DT Journal

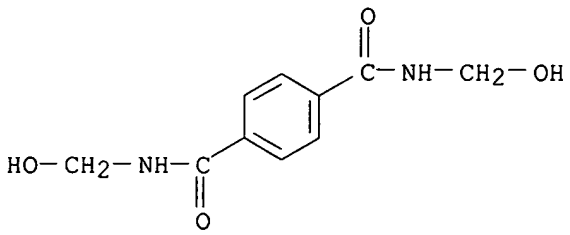
LA Unavailable

AB cf. C. A. 26, 3941. As an illustration of the rule that infusibility and insolubility of a resin result only when there is more than one reactive (condensing or polymerizing) group in the mol. is presented the fact that aryldisulfonamide-formaldehyde resin can be made infusible and insol., whereas arylmonosulfamide-formaldehyde resin cannot. With alc. HCl the latter yields crystalline methylene compds., arylsulfonamide and CH2O and probably consists of 3-membered methylenemethylolarylsulfonamide groupings carrying one terminal methylol group. Crystalline dimethylenemethylol-tri-o-toluenesulfonamide was isolated from the reaction products. The hardenable aryldisulfonamide-formaldehyde resin also is built up of methylene-methylol groupings, which can, however, in many cases go over into pure dimethylenearylsulfonamides (or their polymers) of resinous character.

IT **32445-18-4**, Terephthalamide, N,N'-bis(hydroxymethyl)- (preparation of)

RN 32445-18-4 HCAPLUS

CN 1,4-Benzenedicarboxamide, N,N'-bis(hydroxymethyl)- (9CI) (CA INDEX NAME)



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